

INTERNATIONAL SEARCH REPORT

Interr Application No
 PCT/BR2004/000240

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 F04B35/04 F04B49/06

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 F04B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal , PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 176 683 B1 (YANG SOON-BAE) 23 January 2001 (2001-01-23)	1-5, 7-9, 11-13, 15, 16, 18-31
Y	abstract column 2, lines 7-38 column 3, lines 11-33 column 4, line 37 - column 5, line 16 column 6, lines 1-14 claim 3	6, 10, 14, 17
Y	US 2003/161734 A1 (KIM TAE-DUK) 28 August 2003 (2003-08-28) abstract; figure 3 paragraph '0003! paragraph '0008! paragraphs '0014!, '0015!	6, 10, 14, 17
		-/-

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

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- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
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Date of the actual completion of the international search

18 April 2005

Date of mailing of the international search report

22/04/2005

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INTERNATIONAL SEARCH REPORTInt'l Application No
PCT/BR2004/000240**C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT**

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2003/219341 A1 (DOVEY STEPHEN J ET AL) 27 November 2003 (2003-11-27) abstract paragraph '0013! paragraph '0015! -----	1-31

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Information on patent family members

Inte Application No
PCT/BR2004/000240

Patent document cited in search report	Publication date		Patent family member(s)		Publication date
US 6176683	B1	23-01-2001	BR 9901136 A CN 1273328 A DE 19918930 A1 JP 3075475 B2 JP 2000310185 A		11-01-2000 15-11-2000 02-11-2000 14-08-2000 07-11-2000
US 2003161734	A1	28-08-2003	KR 2003071359 A JP 2003254251 A		03-09-2003 10-09-2003
US 2003219341	A1	27-11-2003	EP 1143146 A2 JP 2001349280 A		10-10-2001 21-12-2001